

CLAIMS

1. A receiver (REC) comprising:
  - means for using a network stack (PR) intended to process a data unit (UDR) received via a network (R),
  - means for establishing a direct connection (CD) between a departure layer (L<sub>1</sub>) and an arrival layer (L<sub>7</sub>) of said network stack,
  - means (GENER) for generating local data (DL) at the level of said departure layer (L<sub>1</sub>), said local data being intended to be transmitted to said arrival layer (L<sub>7</sub>) via said direct connection (CD),
  - means (PACKET) for packeting said local data (DL) into a data structure (SDL), and
  - means (RETRIEV) for retrieving said local data (DL) at the level of said arrival layer (L<sub>7</sub>).
2. A receiver (REC) as claimed in claim 1, characterized in that it comprises marking means (MARK) intended to associate said data structure (SDL) with a received data unit (UDR) by adding a marker (M<sub>k</sub>) to it.
3. A receiver (REC) as claimed in claim 2, characterized in that said marker (M<sub>k</sub>) is chosen to be equal to said received data unit (UDR).
4. A method of processing a data unit (UDR) received via a network (R), intended to be used by a receiver (REC) comprising means for using a network stack (PR) and means for establishing a direct connection (CD) between a departure layer (L<sub>1</sub>) and an arrival layer (L<sub>7</sub>) of said network stack (PR), said method comprising the steps of:
  - generating (GENER) local data (DL) at the level of said departure layer (L<sub>1</sub>), said local data (DL) being intended to be transmitted to said arrival layer (L<sub>7</sub>) via said direct connection (CD),
  - packeting (PACKET) said local data (DL) into a data structure (SDL), and
  - retrieving (RETRIEV) said local data (DL) at the level of said arrival layer (L<sub>7</sub>).
5. A method of processing a data unit (UDR) received via a network (R) as claimed in claim 4, characterized in that said method also comprises a marking step (MARK)

intended to associate said data structure (SDL) with a received data unit (UDR) by adding a marker ( $M_k$ ) to it.

6. A transmitter (EM), comprising:

- 5 - means for using a network stack (PR') intended to process a data unit (UDR) received via a network (R),
- means for establishing a direct connection (CD') between a departure layer ( $L'_7$ ) and an arrival layer ( $L'_1$ ) of said network stack,
- means (GENER) for generating local data (DL') at the level of said departure layer  
0 ( $L'_7$ ), said local data (DL') being intended to be transmitted to said arrival layer ( $L'_1$ ) via said direct connection (CD'),
- means (PACKET') for packeting said local data (DL') into a data structure (SDL'), and
- means (RETRIEV') for retrieving said local data (DL') at the level of said arrival  
5 layer ( $L'_1$ ).

7. A transmitter (EM) as claimed in claim 6, characterized in that said transmitter also comprises marking means (MARK') intended to associate said data structure (SDL') with said data to be transmitted (DE), by adding a marker ( $M'_k$ ) to it.

0

8. A transmitter (EM) as claimed in claim 7, characterized in that said marker ( $M'_k$ ) is chosen to be equal to said data to be transmitted (DE).

9. A transmission system comprising a transmitter (EM), a network (R) and a  
5 receiver (REC) for transmitting a data unit (UDE) from said transmitter to said receiver via said network, said receiver comprising:

- means for using a network stack (PR) intended to process a data unit (UDR) received via a network (R),
- means for establishing a direct connection (CD) between a departure layer ( $L_1$ ) and an  
0 arrival layer ( $L_7$ ) of said network stack,
- means (GENER) for generating local data (DL) at the level of said departure layer ( $L_1$ ), said local data (DL) being intended to be transmitted to said arrival layer ( $L_7$ ) via said direct connection (CD),
- means (PACKET) for packeting said local data (DL) into a data structure (SDL), and

- means (RETRIEV) for retrieving said local data (DL) at the level of said arrival layer (L<sub>7</sub>).

10. A transmission system comprising a transmitter (EM), a network (R) and a  
5 receiver (REC) for transmitting data (DE) from said transmitter to said receiver via said network, said transmitter comprising:

- means for using a network stack (PR') intended to transform said data (DE) to be transmitted into a data unit (UDE),
- means for establishing a direct connection (CD') between a departure layer (L'<sub>7</sub>) and  
10 an arrival layer (L'<sub>1</sub>) of said network stack,
- means (GENER) for generating local data (DL') at the level of said departure layer (L'<sub>7</sub>), said local data (DL') being intended to be transmitted to said arrival layer (L'<sub>1</sub>) of said direct connection,
- means (PACKET') for packeting said local data (DL') into a data structure (SDL'),  
15 and
- means (RETRIEV') for retrieving said local data (DL') at the level of said arrival layer (L'<sub>1</sub>).

11. A computer program for a receiver (REC), comprising a set of instructions for  
20 performing a method as claimed in claim 4 or 5, when said program is executed by a processor.